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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/785,317	02/24/2004	Armen N. Abazajian	41290-00013USPT	9663
51738 7590 01/16/2007 BAKER & MCKENZIE LLP Pennzoil Place, South Tower 711 Louisiana, Suite 3400 HOUSTON, TX 77002-2716			EXAMINER FIGUEROA, JOHN J	
			ART UNIT	PAPER NUMBER
			1712	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		01/16/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/785,317

Applicant(s)

ABAZAJIAN ET AL.

Examiner

John J. Figueroa

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) 27-39 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>5/04 & 10/04</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group I, claims 1-26 in the reply filed on October 26, 2006 is acknowledged. Accordingly, claims 27-39 have been withdrawn from consideration as drawn to a non-elected invention.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The limitations in independent claims 1 and 9 reciting "wherein the ratio of terminal monomethyl branching to internal monomethyl branching is at least ..." are vague and confusing because it is unclear as to how one skilled in the art is to determine/measure these ratios. It is unclear as to whether this phrase is actually meant to limit the molar/mass ratio of products having end or terminal chain monomethyl branching to the products having internal branching.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-7, 9 and 11-18 rejected under 35 U.S.C. 102(b) as being anticipated by United States Patent Number (USPN) 6,296,757 B1 to Wittenbrink et al., hereinafter 'Wittenbrink'.

Wittenbrink discloses a composition for diesel fuels or blending stocks having excellent lubricity and oxidative stability produced from a Fischer-Tropsch process including the use of a syngas. (Abstract; col. 1, lines 12-43; col. 2, lines 16-30) The composition comprises at least 95% by wt. of the total composition of paraffins having an isoparaffin/normal paraffin ratio of 0.3 to 3.0; about 2% of olefins; and 0.001 to 0.3 wt. % of oxygenates, wherein the isoparaffins are preferably monomethyl branched (greater than 50% terminal branched). (Col. 3, line 50 to col. 4, line 5)

Regarding the limitation in claims 6 and 15-18 concerning, *inter alia*, the use of nitrogen-containing syngas in the Fischer-Tropsch reaction process that forms the synthetic fluid, a product by process claim is not limited to the manipulations of the recited steps, only the structure implied by the steps. "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its

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method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.” In re Thorpe, 777F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985)

Thus, the claims are anticipated by Wittenbrink.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. Claims 1-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,110,874 to Van Slyke, hereinafter ‘Van Slyke’ in view of USPN 5,589,442 to Gee et al; hereinafter ‘Gee’.

Van Slyke discloses an inexpensive, non-toxic synthetic fluid as a drilling fluid comprising at least one drilling fluid additive (e.g., an emulsifier, a viscosifier, a

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weighting agent, and an oil-wetting agent) and an inexpensive, non-toxic base fluid; wherein said base fluid is a synthetic fluid having a pour point greater than about -30°C and comprising (i) at least about 95 weight percent hydrocarbons containing 11 or more carbon atoms, (ii) greater than 5 weight percent hydrocarbons containing 18 or more carbon atoms, (iii) at least about 50 weight percent isoparaffins, (iv) at least about 90 weight percent total paraffins, (v) at least 2 hydrocarbons containing a consecutive number of carbon atoms, (vi) less than about 1 weight percent naphthenics, and (vii) less than about 0.1 volume percent aromatics. (Abstract; col. 1, lines 30-49; col. 2, lines 43-58) This isoparaffin synthetic fluid contains (i) less than about 1 weight percent sulfur, (ii) less than about 1 weight percent nitrogen, and (iii) less than about 1 weight percent oxygenated compounds. (Col. 2, lines 1-4)

Van Slyke discloses that this synthetic fluid is prepared by a Fischer-Tropsch process and/or a modification thereof, which entails reacting carbon monoxide and hydrogen over a catalyst (e.g., iron, ruthenium, or cobalt) to produce products that, in the absence of secondary transformations, are highly linear. (Col. 9, lines 33-50) When desired, some or all of the linear products are subjected to a conversion process where (a) olefins present in the Fischer-Tropsch product are hydrogenated, (b) small amounts of oxygen-containing compounds, mainly primary alcohols, are removed, (c) the Fischer-Tropsch product is hydroisomerized, and (d) the n-paraffins are hydrocracked to isoparaffins of a desired chain length and/or boiling range. (Col. 9, lines 50-58) Due to the manner in which they are synthesized, the synthetic fluids are composed of hydrocarbons containing a consecutive number of carbon atoms (i.e., a mixture of

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hydrocarbons where the carbon atom content of the individual hydrocarbons is C_n , C_{n+1} , C_{n+2} , C_{n+3} , etc. and n is a whole number). The synthetic fluids can be composed of at least 2, more commonly at least 3, even more commonly at least 4, and most commonly at least 5 hydrocarbons containing a consecutive number of carbon atoms (proportional to "ratio of terminal monomethyl branching to internal monomethyl branching"). (Col. 9, line 59 to col. 10, line 35)

Furthermore, Van Slyke discloses that the base fluid can include additives such as one or more surfactants (e.g., emulsifiers, wetting agents), viscosifiers, weighting agents, fluid loss control agents, and shale inhibiting salts. (Col. 11, lines 1-56)

Regarding the limitation in claims 5, 6, 14-18, 21 and 25 concerning the use of nitrogen-containing syngas in the Fischer-Tropsch reaction process that forms the synthetic fluid, a product by process claim is not limited to the manipulations of the recited steps, only the structure implied by the steps. "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985)

Although Van Slyke discloses the composition containing olefins, Van Slyke does not disclose the drilling fluid containing about 7% to about 10% by wt. of olefins.

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Gee, however, teaches that a larger percentage of olefins is preferable when operating under harsh conditions, such as offshore drilling. Among the advantageous characteristics of having a larger amount of olefins in a drilling fluid are low pour point, low viscosity, acceptable flash point, lack of sheen, and minimal toxicity. (Col. 4, lines 10-37)

Therefore, it would have been obvious to a person of ordinary skill in the art at the time that the claimed invention was made to form Van Slyke's drilling fluid having a higher content of olefins. It would have been obvious to one skilled in the art to incorporate a larger weight percentage of olefins to provide the drilling fluid with, *inter alia*, a lower pour point, lower viscosity and acceptable flash point, and therefore attain a resultant fluid that is more effective when used as in drilling operations under harsh conditions as taught by Gee.

Thus, the instant claims are unpatentable over Van Slyke and Gee.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John J. Figueroa whose telephone number is (571) 272-8916. The examiner can normally be reached on Mon-Thurs & alt. Fri 8:00-5:30pm.

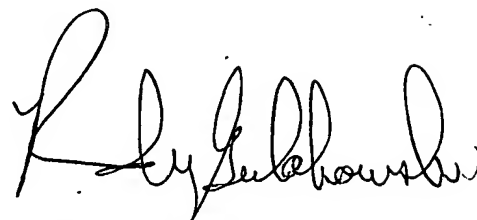
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571) 272-1302. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JJF/RAG



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